

IN THE CLAIMS:

1. (currently amended) A dehumidification system, comprising:

a dehumidifier;

a user interface;

a humidity sensor for determining relative humidity of an area;

a temperature sensor for determining relative temperature of an

area;

means carried by said user interface for selecting a desired  
humidity for said area;

a building material moisture sensor for measuring the building  
material moisture in said area;

means for selecting a desired building material moisture; and

a controller interconnected with said dehumidifier, said humidity  
sensor, and said temperature sensor, said desired humidity selecting means,  
said building material moisture sensor, and said desired building material  
moisture selecting means, and wherein said controller activates said dehumidifier  
when said the relative humidity is higher than said desired humidity, and wherein  
said controller activates said dehumidifier when the actual building material  
moisture is higher than said desired building material moisture.

2. (original) The dehumidification system as recited in claim 1, wherein  
said dehumidifier, said user interface, and said controller are connected by  
electrical wiring.

3. (original) The dehumidification system as recited in claim 1, wherein said dehumidifier, said user interface, and said controller are connected by wireless connection.

4. (original) The dehumidification system as recited in claim 1, further comprising a plurality of fans that are connected to said dehumidifier.

5. (original) The dehumidification system as recited in claim 1, wherein said user interface unit includes a service light.

6. (currently amended) The dehumidification system as recited in claim 1, wherein said user interface unit includes a display, wherein said display shows ~~said~~ the relative humidity, said desired humidity, and the temperature of said area.

7. (original) The dehumidification system as recited in claim 1, wherein said user interface unit includes a power input.

8. (canceled).

9. (currently amended) The dehumidifier as recited in claim 8 1, wherein said controller activates said dehumidifier either when ~~said~~ the relative humidity is higher than said desired humidity or when ~~said~~ the actual building material moisture is higher than said desired building material moisture.

10. (currently amended) A method for maintaining the moisture level of an area at or below a pre-selected level, comprising:

installing a dehumidifier;

installing a user interface;

installing a humidity sensor for determining relative humidity of an

area;

installing means for selecting a desired humidity for said area;

installing a building material moisture sensor for measuring building material moisture;

installing a temperature sensor for measuring relative temperature for said area;

installing a controller; and

connecting said dehumidifier, said user interface, said humidity sensor, said temperature sensor, said desired humidity selecting means, said building material moisture sensor, and said controller, wherein said controller activates said dehumidifier when ~~said~~ the relative humidity is higher than said desired humidity.

11. (original) The method as recited in claim 10, further comprising installing at least one fan.

12. (original) The method as recited in claim 11, further comprising connecting said at least one fan to said dehumidifier.

13. (canceled).

14. (currently amended) The method as recited in claim ~~43~~ 10, further comprising installing means for selecting a desired building material moisture, wherein said controller activates said dehumidifier when said the actual building material moisture is higher than said desired building material moisture.

15. (currently amended) The method as recited in claim 10, wherein said user interface has a display that is remote from said ~~humidifier~~ dehumidifier.

16. (original) The method as recited in claim 15, wherein said display includes said selecting means.

17. (original) The method as recited in claim 16, further comprising selecting a desired humidity.

18. (original) The method as recited in claim 10, wherein said connecting step is done by wireless connection.

19. (original) The method as recited in claim 10, wherein said connecting step is done by electrical wiring.

20. (original) The method as reciting in claim 10, further comprising connecting said dehumidifier, said user interface, said humidity sensor, said selecting means, and said controller to an alarm system.

21. (currently amended) A monitoring system, comprising:

- a sensor for determining the humidity, moisture, and~~or~~ temperature of an area;
- a first controller that is connected to said sensor, said first controller capable of receiving multiple inputs including a humidity input, a moisture input, and a temperature input;
- means for communicating the humidity, moisture, and~~or~~ temperature to said first controller;
- means for warning when the humidity, moisture, and~~or~~ temperature within said area is above a preset, desired humidity, moisture, and/or temperature, said warning means being connected to said first controller;
- and

means for adjusting the humidity, moisture, and~~er~~ temperature to approximately equal to or below the preset, desired humidity, moisture, and~~er~~ temperature, said adjusting means being connected to said warning means.

22. (currently amended) The monitoring system as recited in claim 21, wherein said adjusting means includes a dehumidification system, comprising:

a dehumidifier;

a user interface;

a humidity sensor for determining relative humidity of an area;

means carried by said user interface for selecting a desired humidity for said area; and

a second controller interconnected with said dehumidifier, said humidity sensor, and said selecting means, and wherein said second controller activates said dehumidifier when said the relative humidity is higher than said desired humidity

23. (original) The monitoring system as recited in claim 22, further comprising a ventilation system connected to said dehumidification system

24. (original) The monitoring system as recited in claim 21, wherein said adjusting means includes a dispatched repair person

25. (original) The monitoring system as recited in claim 21, further comprising means for warning said first controller when said adjusting means has malfunctioned and is in need of maintenance.

26. (original) The monitoring system as recited in claim 21, wherein said sensor, said first controller, said communicating means, said warning means, and said adjusting means are electrically connected.

27. (original) The monitoring system as recited in claim 21, wherein said sensor, said first controller, said communicating means, said warning means, and said adjusting means are connected by radio frequency communication.

28. (original) The monitoring system as recited in claim 21, wherein said sensor, said first controller, said communicating means, said warning means, and said adjusting means are connected by wireless communication.

29. (original) The monitoring system as recited in claim 21, wherein said sensor includes a single sensor in a single housing for detecting one of humidity, moisture, and temperature.

30. (original) The monitoring system as recited in claim 21, wherein said sensor includes multiple sensors in a single housing for detecting a combination of humidity, moisture, and temperature.

31. (new) A monitoring system, comprising:

a sensor for determining the humidity, moisture, and/or temperature of an area, wherein said sensor includes a single sensor in a single housing for detecting one of humidity, moisture, and temperature;

a first controller that is connected to said sensor, said first controller capable of receiving multiple inputs including a humidity input, a moisture input, and a temperature input;

means for communicating the humidity, moisture, and/or

temperature to said first controller;

means for warning when the humidity, moisture, and/or temperature within said area is above a preset, desired humidity, moisture, and/or temperature, said warning means being connected to said first controller; and

means for adjusting the humidity, moisture, and/or temperature to approximately equal to or below the preset, desired humidity, moisture, and/or temperature, said adjusting means being connected to said warning means.